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network entity, an analyzing means adapted to analyze said service category of said received message, a marking means adapted to mark packets based on a result of said analysis by said analyzing means, wherein said transmission means is further adapted to forward said marked packets to a data 5 network access node (GGSN).

Further, a data network access node (GGSN) for use in a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, comprises a transmission means adapted to receive marked packets from a data network control entity (CSCF), a mapping means adapted to map a marking of a received packet to a routing indicator, and an assigning means adapted to assign a specific context to said message dependent on the mapped routing indicator.

Accordingly, as has been described herein above, the present invention relates to a method for handling of messages between a terminal and a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, said method comprising the steps of: receiving a message at said network, analyzing said service category of 25 said received message, and assigning a specific context to said message dependent on the analyzed service category. The present invention also relates to a network control entity, an access node and a network comprising the same.

Although the present invention has been described herein 30 above with reference to its preferred embodiments, it should be understood that numerous modifications may be made thereto without departing from the spirit and scope of the invention. It is intended that all such modifications fall within the scope of the appended claims.

The invention claimed is:

1. A method for handling of messages between a terminal and a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, said method comprising the steps of:

receiving a message at said network,

- analyzing said service category of said received message, and
- assigning a specific context to said message dependent on the analyzed service category,
- wherein contexts for messages of a specific protocol rely on a same context address defined between the terminal and the data network, and
- wherein said assigning comprises the further step of marking said message dependent on the analyzed service category, and setting a routing indicator dependent on said marking, said routing indicator being adapted to selectively assign said specific context to said message. 55
- 2. A method according to claim 1, wherein said marking is effected by setting header information in said message to a value corresponding to the service category.
- 3. A method according to claim 2, wherein said marking is effected by setting Differentiated Service CodePoints using 60 the Differentiated Service bit field in the message header.
- **4.** A method according to claim **1**, wherein said marking is effected by setting transport protocol port numbers to a value corresponding to the service category.
- **5**. A method according to claim **1**, wherein said routing 65 indicator to which said marking is mapped is a traffic flow template TFT.

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- **6**. A method according to claim **1**, wherein said different service categories are indicated by a service type identifier included in the message, and said analyzing is based on said service type identifier.
- 7. A method according to claim 1, wherein at a network node receiving said message there is defined a profile for each message type adapted to allocate a service category to each received message, and said analyzing is based on said profile.
- **8**. A method according to claim **7**, wherein said profile for each message type defines a policy for an action to be taken on said message.
- **9**. A data network control entity for use in a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, said entity comprising:
 - a transmission means adapted to receive a message at said network entity,
 - an analyzing means adapted to analyze said service category of said received message,
 - a marking means adapted to mark packets based on a result of said analysis by said analyzing means,
 - wherein said transmission means is further adapted to forward said marked packets to a data network access node,
 - wherein contexts for messages of a specific protocol rely on a same context address defined between the terminal and the data network access node.
- 10. An entity according to claim 9, wherein said marking means is further adapted to mark said message dependent on the analyzed service category.
- 11. An entity according to claim 10, wherein said marking is effected by setting header information in said message to a value corresponding to the service category.
- 12. A method according to claim 11, wherein said marking is effected by setting Differentiated Service CodePoints using the Differentiated Service bit field in the message header.
- 13. A method according to claim 10, wherein said marking is effected by setting transport protocol port numbers to a value corresponding to the service category.
- 14. A data network comprising at least a data network control entity according to claim 9, further comprising a data network access node for use in a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, said node comprising a transmission means adapted to receive marked packets from a data network control entity, a mapping means adapted to map a marking of a received packet to a routing indicator, and an assigning means adapted to assign a specific context to said message dependent on the mapped routing indicator, wherein contexts for messages of a specific protocol rely on a same context address defined between the terminal and the data network.
- 15. A data network access node for use in a data network, wherein messages of a specific protocol are handled using defined specific contexts for messages of said protocol, and wherein messages based on the same specific protocol relate to different service categories, said node comprising:
 - a transmission means adapted to receive marked packets from a data network control entity,
 - a mapping means adapted to map a marking of a received packet to a routing indicator, and
 - an assigning means adapted to assign a specific context to said message dependent on the mapped routing indicator.